



Research That Reaches Out Podcast

Episode 3: Project-Based Learning with Dr. Pam Estes Brewer

Hannah Nabi: Hello, and welcome to the Research that Reaches Out podcast from Mercer University. I'm your host, Hannah Vann Nabi. Research that Reaches Out is an initiative at Mercer University in Macon, GA that was launched in 2015 as part of Mercer's Quality Enhancement Plan, or QEP. We work with faculty and students to help them integrate service and research to address real-world problems affecting our communities at the local, regional, national, and global levels.

Today we welcome Dr. Pam Estes Brewer, Professor of Technical Communication and Director of the Master's in Technical Communication Management program at Mercer University. She earned her Ph.D. in Technical Communication and Rhetoric from Texas Tech University. Dr. Brewer's expertise is in international virtual teams, online communication strategy, and usability research. She published her first book, *International Virtual Teams: Engineering Global Success*, in 2015 and is working as second author on the 2nd edition of *A Research Primer for Technical Communication*. She previously taught at Murray State University and Appalachian State University before joining Mercer's faculty in 2013.

So Dr. Brewer has been doing service-research since before we had a name for it. She uses project-based learning in her usability classes to give her students experience conducting real research for real clients. Full disclosure here – I am a former student of Dr. Brewer's in the master's program and I did take her usability class, so I can personally attest to the impact of her course design and teaching on my skill development, knowledge retention, and, most importantly to me, my confidence in doing that kind of work. This spring, Dr. Brewer's undergraduate students conducted usability testing for both the Georgia Public Library System and the Department of Homeland Security. Dr. Brewer, welcome! We are so excited to have you today!

Pam Estes Brewer: Hi, Hannah. It is good to be here. Thank you.

Hannah Nabi: Well, before we talk about your class. Tell us a little bit about usability. What is it and why does it matter?

Pam Estes Brewer: Well usability is a research method. A lot of people don't think of it that way, but it's a research method that's used to assess how usable a product is. Most specifically, how usable the interface is between a person and a product.

Hannah Nabi: So you pack quite a bit of learning into your one-semester course and, particularly with this semester, you used two external client partners for your students with a pretty tight project timeline for both of those projects. Tell us how your course is designed.

Pam Estes Brewer: Okay, well the class kind of evolved a little bit. We typically stage two full projects during one semester for our usability students. And during that first half of the semester, they are trying to learn all of the basic theory that they can about how to design, conduct, analyze, and report on usability studies so that their data and their analysis are really accurate. They learn by doing the first project in the first half of the semester. And during that project they're really learning that basic theory, so it's quite a challenge to get that first one off the ground. And then they have a chance in the second half of the semester to use all of that learning from their reading and their study in the first project to take it as a bundle, as a skill set, and apply it to a second project. And while it is a very challenging timeline, being able to conduct two full-scale studies really has a significant impact on the students. They feel like they have a chance to gain some significant command of usability research.

Hannah Nabi: And working with the real organizations in the real world can and does raise the stakes for students. So what are some of the ways that you see your students developing both academically and personally, as a result of these client partnerships?

Pam Estes Brewer: Great question. Great question. Students seem to engage much more enthusiastically with real clients than they do with any kind of a case study that I could possibly make up, so right there we get a lot of genuine accountability, enthusiasm, and I think the inclination to stretch themselves further, to try harder, to think more deeply. When we get some of these wonderfully credible clients like the Department of Homeland Security, it just kicks up the interest and the accountability another notch.

Hannah Nabi: So speaking of the Department of Homeland Security, I think that's one of the coolest things about your class is that you get to partner with them. And I actually had the privilege of working with Homeland Security when I took your course, and it was simultaneously exhilarating and terrifying because government. But it was, hands down, one of the most defining and pivotal experiences in my own professional training. How long have you been working with them, and how did that relationship start?

Pam Estes Brewer: Well thanks, Hannah. I love to hear how things affect students. This project started five years ago, and I was relatively new at Mercer at that time. And I was looking for what I call an authentic experiential projects. So the way that this project got started, I started networking, as I often do when I'm looking for good projects, good clients, and one of Mercer's alums works fairly high level within the Department of Homeland Security. Now I think she has to do with some of the efforts against human trafficking. So anyway, I reached out to her and then she put me in touch with the Director of Web Services for the Department of Homeland Security. So really it was networking with Mercer alums that first gave us this opportunity, and now we've evolved into five years, received a citation of appreciation from the Secretary of Homeland

Security for our work. And just this year, we have the opportunity for two of our students to work with health and human services on a lot of the website information on the Covid-19 pandemic, and these two students will have an opportunity to work with folks at the highest level of Health and Human Services and CDC. So it's interesting how you can go from a contact with a Mercer alum to who knows where, you know, really fabulous opportunities.

Hannah Nabi: So I'm curious about when you first started working with external clients for your usability classes. How did you feel? Because I know, as a student, I had eight years of career experience under my belt. When I took your class, I was still really nervous about being able to produce quality deliverables for a real plan. And I had control over what I could do. So I'm wondering, when you first started working with these clients and making commitments on behalf of your students, were you anxious? Were you confident? What were your expectations of your students work? What's surprised you, and how has that changed over time?

Pam Estes Brewer: Well, those are those are such good questions. I'd say, first of all, that I have learned as much about teaching experientially as my students have about usability or any of the other topics that I teach. I think to do these kinds of projects, you have to be willing to embrace mess because you cannot map out how learning will take place. I love the fact that students learn a great deal from these projects, whether or not the projects go smoothly. So I don't grade students on whether a project turns out perfectly and goes smoothly. I grade them on the learning that takes place and how well they apply the skills that we want them to learn from the class. Perfection and smoothness? No, I don't believe that that matters at all in learning. I think learning is messy and learning is often uncomfortable as well.

Hannah Nabi: That is not something I hear from a lot of faculty, I will say. How did you come across that wisdom?

Pam Estes Brewer: Well, I guess I have an inclination to want to work experientially because I get so excited about all of the unexpected learning that takes place. We're always able to meet our classroom goals as long as I steer the ship, you know, but there's so much to be learned that I don't expect. And probably the first time I heard about embracing mess was when I was working on my PhD, and I was in a really good program and they emphasize the fact that good research is messy. You do not know where you're going if you're doing good research, and I think that the same thing applies to teaching and learning. You cannot know exactly where you're going to go because, if you're doing really good stuff, there are gonna be unexpected things.

Hannah Nabi: I think that's such an important point for students and for faculty to recognize, particularly when doing, you know, engaged learning, project-based learning, service-research, because introducing external factors, just like you said, unexpected things will happen. You lose a lot of the control that we value when

we're taking on these big projects. And I think, but, you know, really good things come out of mess, like you said, so I think that's a really important takeaway.

Pam Estes Brewer: Thank you. It's been a good takeaway for me on life I think.

Hannah Nabi: Well, right now, speaking of unexpected things, we're in the midst of this shift in emergency online learning because of the Covid-19 crisis. We're in the last week of class. How has this shift to online in the middle of the semester affected your course?

Pam Estes Brewer: Well it actually affected us in usability very little. My students in that class, they're juniors and seniors and they are very vested in that class. So they were, they were ready to go. Typically when they test participants, we have them come into the usability lab on the Macon campus. And we use a very controlled atmosphere and we test these different aspects of websites or apps. And so what we had to do was to take the test plans that they had already written up, the protocols, and adapt them for remote administration. So whereas my students would have been using software in the lab, we shifted to using Zoom web conferencing, using the audio and video and text transcripts that you can get with Zoom, and they rewrote their protocols and we took it all online.

Hannah Nabi: That's awesome. So I will say that I got to sit in on their presentations to the Georgia Pines Librarians about the testing for the website and the app, and I am a devoted public library user, or patron. And I've already seen changes in the app that I saw your students recommend back in late February, early March, which is cool. Have your students had a chance to go on and look?

Pam Estes Brewer: I will have to ask them. That is so cool that you noticed that, and I would love for us to go in and have a look. Of course we immediately shifted to the DHS, we really immersed in that, but thank you. I'm excited. And we'll go take a look.

Hannah Nabi: I remember one of their recommendations was to rework the interface for renewing books. And that changed and it's, I've used it. Actually I tried to use it, but they keep postponing the reopening of the library so I've got books until June. But it is a lot easier to use. So, I'd love to hear how, if you could have your students look it up while you're in class and record their reaction, I think that would be really cool to listen to. So if anybody is in Georgia and has noticed changes in April to the Pines Library website or app, it's due in part to Dr. Brewer's students.

Pam Estes Brewer: YAY!

Hannah Nabi: So our conversation is coming to an end. But before we close, I'd like you to leave us with your thoughts on why your usability course is Research that Reaches Out.

Pam Estes Brewer: Well that is pretty easy. It's almost like stating the obvious. Usability is a research method. My students are learning how to do usability research by reaching out to government and nonprofit clients. So it's the very definition. And they reach out, they can conduct research anywhere in the world. If we had a study where we needed to reach out to people of Middle Eastern middle class folks and do a study of an interface, we could do that, you know, and so this idea of using real experiences, just essentially, the world becomes my classroom.

Hannah Nabi: I love it. Thank you so much for all of the great work that you're doing and for being such a great supporter of the Research that Reaches Out office and putting this into your classroom. We really appreciate you taking the time to talk with us today.

Pam Estes Brewer: Thank you, Hannah. Thank you all so much.

Hannah Nabi: And thank you to our listeners for tuning in to this episode of the Research that Reaches Out Podcast at Mercer University. You can check us out on our website at QEP.mercer.edu and subscribe to our show at [SoundCloud.com](https://soundcloud.com/research-that-reaches-out)